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Herbert J. Tarenskeen

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JAMES M. STOVER

TERADATA CORPORATION

2835 MIAMI VILLAGE DRIVE

MIAMISBURG, OH 45342

EXAMINER

FLEURANTIN, JEAN B

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/997,442	Applicant(s) TARENSKEEN ET AL.	
	Examiner JEAN B. FLEURANTIN	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This is in response to Applicant(s) arguments filed on 02/15/2008.

The following is the current status of claims:

Claim 1-9 and 31 have been withdrawn.

Claims 10-30 remain pending for examination.

Applicant's arguments filed 02/15/2008, with respect to claims 10-30 have been fully considered but they are not persuasive for the following reasons, see sections (a) (response to arguments) and (b) (repeated rejections).

Response to Arguments

- (a.) Applicant's arguments start from page 6 through page 10.

Applicant's arguments, with respect to 35 U.S.C. § 101 rejection, the arguments have been fully considered are persuasive. Therefore, the rejection has been withdrawn.

In response to applicant's argument, Sections (*Rejections Under 35 U.S.C. § 103*), that "... combined, the references do not teach the claimed subject matter ..." The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the instant application relates to a collection of stored data that is logically related and that is accessible by one or more users. Relational database management system, includes relational tables made up of rows and columns; see specification, para [003].

Accordingly, Taylor '074 discloses a method and apparatus for directly connecting very large data streams from an archive command into a backup data system using an intelligent process; see col. 3,

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lines 34-38. Further in column 4, lines 49-66 and Fig. 2, Taylor '074 discloses a method and apparatus for directly connecting very large data streams from a DBMS into a backup system, an output data stream (38) from a database export command of a DBMS (22) is piped into an intelligent pipe-reading process (30) and distributed over a set of temporary data stores (34) built from raw storage resources (36). When a data store reaches capacity, the intelligent process signals the backup system (12) to begin a backup of that data store, while the remaining export data stream is piped into another available temporary data store (34). Once the final data store has received an end-of-pipe signal, the backup system begins completion processing of the export request (e.g., writing to tape device 18). The backup system keeps a logical backup catalog, and writes it to the backup tape with the archived data streams. Once the archive tape activity is complete, the backup system signals back via the backup control process (39) to the intelligent process.

Abrams discloses the method and system relate to the migration and restoration data; see col. 11, lines 45-56. Further, in column 12, lines 5-22, loading data into a temporary table.

Bohm discloses the search expressions are combined in ordered queries and executed in the assigned order against the information database; col. 2, lines 4-5 and col. 2, lines 22-25.

Kamo discloses a parallel transfer; see col. 2, lines 36-43.

Moreover, In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Also, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA

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1981). Therefore, the combination discloses the claimed limitations. Thus, Kamo discloses a parallel transfer of groups (see Kamo col. 2, lines 36-43). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Abrams/Bohm by parallel transfer as disclosed by Kamo (see Kamo col. 17, lines 10-15). Such a modification would allow the system of Abrams/Bohm provide an access to an alternate track for a defective track can be facilitated at the time of parallel transfer (see Kamo col. 7, lines 36-37), therefore, improving the reliability of the parallel migration of data between systems.

MPEP 2111: During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification" Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). The court found that applicant was advocating ... the impermissible importation of subject matter from the specification into the claim. See also In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definition or otherwise that may be afforded by the written description contained in application's specification.").

The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999).

For the above reasons, it is believed that the last Office Action dated 08/09/2007 was proper. Therefore, the rejection is maintained.

Claim Rejections - 35 USC § 103

(b.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-12 and 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,151,608 issued to Abrams, ("Abrams") in view of U.S. Patent No. 5,404,507 issued to Bohm et al., ("Bohm").

As per claim 10, Abrams discloses "a method of migrating data" (i.e., migrating data; see col. 5, lines 30-31) comprising:

"archiving data from a source table in a source database system" (i.e., archiving data; see col. 19, lines 5-17);

"transferring groups of the archived data, in parallel to corresponding temporary tables in a target database system" (i.e., loading data into temporary table; see col. 12, lines 5-8 and Fig. 4);

"inserting data from the temporary tables into a target table in the target database system" (i.e., loading data into temporary table; see col. 12, lines 5-22 and Fig. 4);

Abrams fails to explicitly disclose making data in the target table available for execution of database queries against the data. However, Bohm discloses making data in the target table available for execution of database queries against the data (see Bohm col. 2, lines 4-5 and col. 2, lines 22-25). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Abrams by making data in the target table available for execution of database queries against the data as disclosed by Bohm (see Bohm Fig. 3, items 306-307). Such a modification would allow the method of Abrams to provide cost effective and still assure uniformity of results, it is desirable to automate the process of finding specific records of items in databases (see Bohm col. 1, lines 45-47), therefore, improving the accuracy of the parallel migration of data between systems.

As per claim 11, in addition to claim 10, Abrams further discloses "archiving the data using a plurality of concurrently active archive modules" (i.e., migrating data; see col. 15, lines 34-38).

As per claim 12, Abrams discloses "transferring the groups of data comprises restoring the groups of data, in parallel, using a plurality of restore modules" (i.e., loading data into temporary table; see col. 12, lines 5-8 and Fig. 4).

As per claim 15, Abrams discloses "communicating through an intermediate storage system" (see Fig. 4 and col. 11, lines 57-67).

As per claim 16, Abrams discloses "storing the source table across plural access manager, each access manager managing access to respectively portions of the source table" (i.e., reading data migration; see col. 15, lines 52-56).

As per claim 17, in addition to claim 1, Abrams further discloses "data associated with a respective set of plural access managers" (i.e., conditions associating; see col. 17, lines 50-54).

As per claim 18, Abrams discloses "copying database definitions from the source database system to the target database system" (i.e., migrating data; see col. 15, lines 10-20).

As per claim 19, Abrams discloses "creating temporary tables in the target database using the copied database definitions" (i.e., creating table; see col. 6, lines 34-37).

As per claim 20, in addition to claim 10, Abrams further discloses "transferring groups of archived data from the second source table, in parallel, to corresponding second set of temporary tables in the target database system" (see Figs. 4 and 5 and corresponding texts).

As per claim 21, Abrams discloses "inserting data from the second set of temporary tables into the second target table in the target database system" (see Fig. 4 and corresponding text).

As per claims 22-25, the limitations of claims 22-25 are similar to claims 10-21, therefore, the limitations of claims 22-25 are rejected in the analysis of claims 10-21, thus, these claims are rejected on that basis.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,151,608 issued to Abrams, ("Abrams") in view of U.S. Patent No. 5,404,507 issued to et al., ("Bohm"), as applied to claims 10-12 and 15-25, and further in view of U.S. Patent No. 6,651,074 issued to Taylor ("Taylor").

As per claims 13 and 14, in addition to claim 10, Abrams fails to explicitly disclose communicating the groups of data between respective pairs of archive modules and restore modules across a transfer medium; communicating across a pipe defined by an operating system in one of the source database system and the target database system. However, Taylor discloses communicating the groups of data between respective pairs of archive modules and restore modules across a transfer medium (i.e., the archive utility as Fig. 2, elements 22, 30, 34 and 36); communicating across a pipe defined by an operating system in one of the source database system and the target database system (i.e., data stream 38 from a database export command of a DBMS 22 is piped into an intelligent pipe reading process 30 and distributed over a set of temporary data stores 34 built from raw storage resources 36; see col. 4, lines 52-55; Fig. 2, elements 38, 30, 39 and 18). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Abrams by communicating the groups of data between respective pairs of archive modules and restore modules across a transfer medium; communicating across a pipe defined by an operating system in one of the source database system and the target database system as disclosed by Taylor (see Taylor Fig. 2). Such a modification

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would allow the method of Abrams to provide a standard mechanism that can be used by processes that do not have to share a common process origin for process-to-process-to-device transfers of large amounts of data (see Taylor col. 2, lines 56-59), therefore, improving the accuracy of the parallel migration of data between systems.

Claims 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,151,608 issued to Abrams, ("Abrams") in view of U.S. Patent No. 5,404,507 issued to et al., ("Bohm"), and further in view of U.S. Patent No. 6,651,074 issued to Taylor ("Taylor"), as applied to claims 10-12 and 15-25 above, and further in view of US Patent No. 5,084,789 issued to Kamo et al., ("Kamo").

As per claim 26, in addition to claim 10, while the combination of Abrams/Bohm substantially discloses the claimed invention, the combination fails to disclose in detail "parallel transfer of groups..." However, Kamo discloses parallel transfer of groups (see Kamo col. 2, lines 36-43). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Abrams/Bohm by parallel transfer as disclosed by Kamo (see Kamo col. 17, lines 10-15). Such a modification would allow the system of Abrams/Bohm provide an access to an alternate track for a defective track can be facilitated at the time of parallel transfer (see Kamo col. 7, lines 36-37).

As per claims 27-30, the limitations of claims 27-30 are similar to claims 10-21, therefore, the limitations of claims 27-30 are rejected in the analysis of claims 10-21, thus, these claims are rejected on that basis.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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CONTACT INFORMATION

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571-272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/JEAN B. FLEURANTIN/

Primary Examiner, Art Unit 2162